

XIII.—A *Synopsis of the Species of the Silurid Genera*
Parexostoma, *Chimarrichthys* and *Exostoma*. By C. TATE
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THE fishes which have usually been placed in the genus *Exostoma* of Blyth fall into three very distinct groups, which should be regarded as genera, as will be apparent from the following synopsis:—

- I. Teeth all pointed, those of the upper jaw forming a band, which is produced backwards at the sides; gill-openings extending on to the lower surface of the body; fold of the lower lip broadly interrupted; pectoral with 11 branched rays .. [gen. nov.]
 PAREXOSTOMA,
 Pectoral extending $\frac{2}{3}$ – $\frac{3}{4}$ of the distance from its base to the base of ventral; caudal peduncle 3 times as long as deep 1. *P. Stoliczka*, Day.
 Pectoral extending $\frac{1}{2}$ – $\frac{3}{5}$ of the distance from its base to the base of ventral; caudal peduncle twice as long as deep [Regan.]
 2. *P. maculatum*,
- II. Teeth all pointed, those of the upper jaw forming a band which is not produced backwards at the sides; gill-openings not extending on to the lower surface of the body; fold of the lower lip continuous or not; pectoral with 13–19 branched rays .. [Sauv.]
 CHIMARRICHTHYS,
 A. Lower angle of gill-opening below the middle of the base of pectoral, which fin extends about to the base of ventral; fold of the lower lip not continuous.
 Pectoral with 13 or 14 branched rays; caudal peduncle much longer than deep 1. *C. Davidi*, Sauv.
 Pectoral with 16 or 17 branched rays; caudal peduncle about as long as deep 2. *C. Blythii*, Day.
 B. Lower angle of gill-opening opposite the middle of the base of pectoral.
 Pectoral with 14 or 15 branched rays, not reaching the ventral; fold of the lower lip not continuous 3. *C. Fee*, Vincig.
 Pectoral with 19 branched rays, extending beyond the base of the ventral; fold of the lower lip continuous [Vincig.]
 4. *C. macropterus*,
- III. Each jaw with 2 bands or patches of small pointed teeth, with an enlarged outer series of compressed obtuse teeth; gill-openings not extending on to the lower surface of the body; fold of the lower lip continuous; pectoral with 10–12 branched rays EXOSTOMA, Blyth.

A. Caudal fin truncate or very slightly emarginate.

- Origin of dorsal posterior to the extremity of pectoral; anal with I 5 rays 1. *E. Vinciguerra*, [Regan.
Origin of dorsal above posterior $\frac{1}{3}$ of pectoral; anal with I 7 rays 2. *E. Andersoni*, [Day.

B. Caudal fin forked or rather deeply emarginate.

- Pectoral with 10 branched rays 3. *E. Berdmorii*, [Blyth.
Pectoral with 12 branched rays 4. *E. labiatum*, [MacClell.

PAREXOSTOMA.

1. *Parexostoma Stoliczkae*.

Exostoma Stoliczkae, Day, Proc. Zool. Soc. 1876, p. 782; Second Yarkand Mission, Ichthyology, p. 1, pl. i. fig. 1 (1878); Fishes of India, p. 502, pl. cxvii. fig. 3 (1878).

Exostoma Oschanini, Herzenstein, Bull. Ac. St. Petersburg, xxxiii. 1890, p. 120.

Hab. Eastern Turkestan.

2. *Parexostoma maculatum*, sp. n.

Depth of body about 6 in the length, length of head nearly 4. Head as broad as long. Eyes small. Snout as long as postorbital part of head and $1\frac{1}{2}$ the interocular width. Nasal barbel extending to eye, maxillary barbel to base of pectoral, outer mandibular barbel to gill-opening. Dorsal I 6, commencing slightly in advance of the extremity of pectoral; adipose fin as long as or longer than its distance from the dorsal. Anal I 5. Pectoral with 11 branched rays, extending $\frac{1}{2}$ – $\frac{3}{5}$ of the distance from its base to the base of ventral. Ventral with 5 branched rays. Caudal truncate. Caudal peduncle twice as long as deep. Olivaceous, with numerous irregular dark spots; caudal with a white posterior margin.

Two specimens, 210 and 255 mm. in total length, from Lhasa, Tibet, collected by Capt. H. J. Walton.

CHIMARRHICHTHYS.

Chimarrichthys, Sauvage, Rev. et Mag. Zool. xxv. 1874, p. 332.

1. *Chimarrichthys Davidi*.

Chimarrichthys Davidi, Sauvage, Rev. et Mag. Zool. xxv. 1874, p. 333.

Exostoma Davidi, Günth. in Pratt, Snows of Thibet, Appendix, p. 245 (1892).

Hab. Eastern Tibet.

2. *Chimarrichthys Blythii*.

Exostoma Blythii, Day, Proc. Zool. Soc. 1869, p. 525; Fishes of India, p. 501, pl. cxvii. fig. 2 (1878).

Hab. Northern Bengal.

3. *Chimarrichthys Fecæ*.

Exostoma Fecæ, Vincig. Ann. Mus. Genov. xxix. 1890, p. 256, pl. viii. fig. 6.

Hab. Karenni Hills, Upper Burma.

4. *Chimarrichthys macropterus*.

Exostoma macropteron, Vincig. Ann. Mus. Genov. xxix. 1890, p. 253, pl. viii. fig. 5.

Hab. Khakhyen Hills, Upper Burma.

EXOSTOMA.

Exostoma, Blyth, Journ. As. Soc. Bengal, xxix. 1861, p. 155; Günth. Cat. Fish. v. p. 264 (1864).

1. *Exostoma Vinciguerræ*, sp. n.

Exostoma labiatum (non MacClell.), Vincig. Ann. Mus. Genov. xxix. 1890, p. 252.

Depth of body about $7\frac{1}{2}$ in the length, length of head 5. Head as broad as long. Diameter of eye 2 in the interocular width, which is $3\frac{1}{4}$ in the length of head. Snout twice as long as postorbital part of head. Nasal barbel extending to posterior margin of eye, maxillary barbel to anterior $\frac{1}{3}$ of pectoral. Outer mandibular barbel not extending to base of pectoral; inner mandibular barbel very small. Fold of the lower lip continuous. Lower angle of gill-opening at the level of the base of the pectoral spine. Dorsal 16, commencing behind the extremity of pectoral; adipose fin long and low, extending on to the caudal. Anal 15. Pectoral with 10 branched rays, extending $\frac{2}{5}$ of the distance from its base to base of ventral. Ventral with 5 branched rays, not reaching the vent. Caudal very slightly emarginate. Caudal peduncle twice as long as deep. Uniformly brownish; fins pale.

A single specimen, 80 mm. in total length, from the Khakhyen Hills, Upper Burma, collected by the late L. Fecæ.

2. *Exostoma Andersonii*.

Exostoma Andersonii, Day, Proc. Zool. Soc. 1869, p. 524.

Hab. Yunnan.

3. *Exostoma Berdmorii*.

Exostoma Berdmorii, Blyth, Journ. As. Soc. Bengal, xxix. 1861, p. 155; Günth. Cat. Fish. v. p. 265 (1864); Day, Proc. Zool. Soc. 1869, p. 526; Fishes of India, p. 502 (1878).

Hab. Tenasserim.

4. *Exostoma labiatum*.

Glyptosternon labiatum, MacClell. Journ. Nat. Hist. Calcutta, ii. 1842, p. 588.

Exostoma labiatum, Günth. Cat. Fish. v. p. 265 (1864); Day, Proc. Zool. Soc. 1869, p. 526; Fishes of India, p. 502 (1878).

Hab. Assam.

XIV.—*Descriptions of Five new Cyprinid Fishes from Lhasa, Tibet, collected by Captain H. J. Walton, I.M.S.* By C. TATE REGAN, B.A.

DURING the recent expedition to Tibet, Captain H. J. Walton made a small collection of fishes, which he has forwarded to the British Museum. Of seven species represented, six appear to be new to science, the exception being *Nemachilus Stoliczkae*, Day. This result is not surprising, for I believe that fishes have not before been described from this part of the Brahmaputra system. Five Cyprinid fishes are described below, whilst a new Silurid, *Parexostoma maculatum*, is described on p. 183.

1. *Schizopygopsis Younghusbandi*.

Pharyngeal teeth 4 : 3—3 : 4, cylindrical, obtusely pointed, those of the outer series slightly curved inwards. Depth of body $4\frac{1}{3}$ — $5\frac{1}{4}$ in the length, length of head 4— $4\frac{1}{2}$. Breadth of head $1\frac{3}{5}$ — $1\frac{4}{5}$ in its length, diameter of eye 4—6, length of snout $3\frac{1}{5}$ —4, interorbital width $2\frac{3}{5}$ — $3\frac{1}{5}$. Snout obtuse; anterior edge of upper jaw slightly below the level of the lower margin of the eye; maxillary extending to below anterior edge of eye; lower jaw shorter than the upper, with a nearly straight transverse anterior edge. Dorsal III 8—9, its origin a little nearer to tip of snout than to base of caudal; third simple ray slender, articulated, not serrated. Anal III 5—7. Pectoral extending $\frac{1}{2}$ — $\frac{3}{5}$ of the distance from its base to the base of ventral. Origin of ventral below or a little behind the middle of dorsal. Caudal forked. Caudal peduncle $2\frac{1}{3}$ — $2\frac{3}{4}$